## Measuring Your Structure and Drawing Scaled Plans

Applications for building permits within the unincorporated portions of the County must include scaled floor plans and a scaled plot plan.

This guide suggests how the homeowner may draw and measure their house and land so that it will provide enough information to fulfill the requirements.

## Items required:

Standard measuring tape -25 ft .
Pad of graph paper $-4 \times 4$ grid ( 4 lines to the inch)
Pencil - sharpened 2H
Red ball point pen
Eraser

## Information to obtain:

Assessor's Parcel Map:

Assessors Drawing of Building:

A copy may be obtained at the Department of Public Works, Surveyor's Office

Owner can obtain copy at the Assessor's Office, if available

Scanned Building Permit Drawings: From the late 1980's on, may be ordered from the Records Room of the Planning Department

## THE FLOOR PLAN(S):

## Step 1.

Draw a rough outline of the plan. Do NOT worry about scale or measuring at this point. Take a sheet of blank $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ notepaper and roughly draw a single line drawing of the rooms show windows and doors. You can draw this with a pencil so you can erase easily. It is the proportions of the rooms and the locations that you should try to record accurately.


## Step 2.

Measure the walls on the inside of the room. Start in one corner and measure to the edge of the window, measure across the opening of the window, and then finish measuring from the window(s) to the wall. Note the measurements on your rough drawing. Measurements should be to the nearest $1 / 2^{\prime \prime}$. It is clearer if you record the measurements with a red pen. Measure all window and door openings. Doors and windows are commonly measured in feet and inches; 30" door would be a 2'6" door.


## Step 3.

You are now going to draw the floor plan to scale. You should use the scare ulat $1 / 4$ " on the drawing is the same as 1 ft . in actual dimension. The pad of graph paper should be gridded to $1 / 4 "$ squares (check before you buy $\mathrm{it!}$ ). The walls are approximately 6 " thick (close enough for this purpose), so you should draw them at roughly half the width of one square of the grid.

You may have to tape more than one sheet of grid paper together to make the drawing. Check this by adding up the overall dimensions of the house. For example: if the house is $26^{\prime} \times 46^{\prime}$, when you draw it to scale, the drawing itself will be $61 / 2^{\prime \prime} \times 111 / 2^{\prime \prime}$ (divide 26 by $4=6.5$ and divide 46 by $4=11.5$ ). You can see that this particular plan will need two sheets taped together! For this drawing, only the overall dimensions are important. Please put the owners name and scale on each drawing. You can use the dimension that you worked out on the initial sketch. Remember to add 6 " for the walls (you measured from interior finish to interior finish). Label each room.

IF YOU HAVE A TWO STORY HOUSE, REPEAT THESE STEPS FOR BOTH FLOORS.


## THE PLOT PLAN:

Step 1: Obtain a copy of your Assessor's Parcel Map. If you don't know the parcel number, you can find that out and order a map at the County of Santa Cruz County Surveyor's Office (701 Ocean Street, Fourth Floor). An 11" x 17" copy is to scale and that is what you should purchase. Find your lot on the map. The people at the Surveyor's Office will help you locate it.

Parcel indicated by the arrow is APN: 028-233-17


Step 2: Use the graph paper to draw the property outline. Do not draw anything else at this time. For this drawing, the scale should be $1 / 8^{\prime \prime}=1^{\prime}-0$ ". Consider whether you need two sheets taped together as before. The example below is a 40' by 100' parcel.


Step 3: Hopefully, you have fences at the sides and/or rear of your property but if you don't skip to Step 4. You know the overall size of the house from the previous drawing. Measure the distance from the house to the fence at the rear and the house to one fence at either side. Now you can draw the outline of the house on the property.

Step 4: If you don't have fences, you will have to determine the distance from the front setback. Start by looking at the assessor's map and finding out the width of the right-of-way of your street (usually 40 or 50 feet). You may be able to find plans on file with the County which may have the setbacks on them. Check with the Assessor's Office and/or the Planning Office. If you can't locate existing plans you will have to do extra work.

Measure the actual width of the paving. In most cases (particularly on straight roads in the urban area) the center line of the street is the centerline of the right-of-way. Divide the width of the paving in half and measure from the centerline half the width of the right-of-way toward your house. This will locate your front property line. Many times in the urban areas, the front property line can be a couple of feet from the back of the sidewalk. Get the dimensions of sidewalk, planting strip, curb, etc. and draw them on your site plan. Measure the distance from the edge of sidewalk or paving to the front of your house. You will have to look for clues such as the fences on the property to the rear of yours to figure out one side dimension. Draw your house on the property. In situations where the property line(s) cannot be determined, you may have to have a survey done.

Step 5: Measure your driveway and parking area. Show this on the property plan. Be sure to dimension the width and length. This example would allow for four parking spaces - two in the garage and two on the driveway.


